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Sommario/riassunto

This book presents a thoughtful compilation of chapters derived from the proceedings of the 8th International Arab Conference on Mathematics and Computations (IACMC 2023), held at Zarqa University in Zarqa, Jordan, from 10–12 May 2023. Encompassing a broad spectrum of themes crucial to contemporary research and development, the book delved into subjects ranging from partial and differential equations to fractional calculus, from probability and statistics to graph theory, and from approximation theory to nonlinear dynamics. Moreover, it explores pivotal areas such as numerical analysis and methods, as well as fostering interdisciplinary mathematical research initiatives. Building upon the legacy of its predecessors, IACMC 2023 served as a premier platform for scholars, researchers and industry professionals to converge and exchange insights on a myriad of cutting-edge advancements and practical applications within the realm of mathematical sciences. This volume encapsulates the essence of IACMC 2023, offering readers a comprehensive overview of the latest breakthroughs and trends in mathematical sciences while serving as a testament to the collaborative spirit and intellectual vigor that define this esteemed conference series.